

## REMARKS/ARGUMENTS

This Amendment is in response to the Final Office Action dated November 13, 2007. Claims 2-31 are pending. Claims 2-31 are rejected. Claims 9, 10, 30, and 31 have been amended. Claims 2-8, 11-19, and 22-29 have been canceled. Accordingly, claims 9-10, 20-21, and 30-31 remain pending in the present application.

Claims 2-31 are rejected under 35 USC 102(b) as being anticipated by US Patent No. 5,335,343 to Lampson. Claims 2-8, 11-19, and 22-29 have canceled. Their rejections are thus moot. Per the remaining claims as amended, Applicant respectfully disagrees with the Examiner.

Lampson discloses an optimization of the two-phase commit protocol involving a coordinator and subordinates. In Lampson's protocol, when a commit for a transaction is desired, the coordinator sends a prepare message to the subordinates. When a subordinate receives the prepare message, the subordinate determines, by examining its log, whether it has done any updates to the database. If not, then the subordinate sends a "read" vote to the coordinator, releases its locks, and forgets the transaction. This subordinate does not need to be sent the commit or abort message by the coordinator.

(Col. 9, line 49 – Col. 10, line 6)

With the invention (as recited in amended independent claims 9, 10, 30, and 31), prior to the termination of the transaction, the cohort sends a message of the transaction to the coordinator that is augmented with state information indicating whether the transaction modifies the cohort's data. The coordinator retains the state information for the cohort. When the transaction terminates, the coordinator reads the state information for the cohort. If the state information for the cohort indicates that the transaction does

not modify the cohort's data, the coordinator sends an abort message of the two-phase commit protocol to the cohort without sending a commit request message of the two-phase commit protocol. Thus, by sending prior to the termination of the transaction the augmented message with the cohort's state information indicating that the transaction does not modify the cohort's data, the coordinator is "saved" from having to send a commit request message of the two-phase commit protocol when the transaction terminates.

The recited invention differs from Lampson in the following ways.

First, Lampson does not teach the cohort/subordinate sending a message of the transaction augmented with the cohort's state information prior to the termination of the transaction. In Lampson, any message with a subordinate's state information, such as the read vote, is sent after the transaction terminates, i.e., after a commit for the transaction is desired.

Second, when the transaction terminates, Lampson requires the coordinator to send a prepare message of the two-phase commit protocol to the subordinates to trigger each subordinate to determine if it has done any updates to the database. In contrast, when the transaction terminates in the recited invention, it is the coordinator, not the cohort, that determines if the transaction modifies a cohort's data, by reading the retained state information for the cohort.

Third, when the transaction terminates, Lampson requires the coordinator to send a prepare message of the two-phase commit protocol to the subordinates, regardless of whether or not the subordinates has done any updates to the database. In contrast, with the recited invention, if the state information for the cohort indicates that the transaction

does not modify the cohort’s data, the coordinator sends an abort message without sending a commit request message.

Fourth, Lampson teaches that in the situation where a subordinate is “read-only”, the coordinator sends the subordinate the prepare message but not the abort message. (Col. 10, lines 2-4) In contrast, with the recited invention, when the cohort is read only (i.e., the transaction does not modify the cohort’s data), the coordinator sends to the cohort an abort message without sending the commit request message.

For the above reasons, Lampson does not teach or suggest the invention as recited in amended independent claims 9, 10, 30, and 31. Applicant submits that claims 9, 10, 30, and 31 are thus allowable over Lampson. Applicant further submits that dependent claims 20-21 are allowable because they depend upon allowable base claims 9 and 10.

Per the Examiner’s comments in the Response to Arguments section, Applicant submits that these comments are moot in view of Applicant’s arguments pertaining to the amended claims.

Applicant disagrees with the Examiner statement on page 6 that “Based on the above admission by applicant, examiner concludes that all subject matter starting at page 15, line 15 of the specification is prior art...” Any admission of prior art by the Applicant, if one was actually made, is limited to the admission itself. Any such admission cannot be extended beyond, such as to portions of the specification where no such admission is made. The plain reading of MPEP 2129 (Applicant is assuming that the Examiner’s citation to MPEP 2128.01 is a typographical error) does not support the Examiner’s position.

Accordingly, Applicant respectfully requests reconsideration and passage to issue

claims 9-10, 20-21, and 30-31 as now presented.

Applicants' attorney believes this application in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Please charge any additional fees required for the amendment or refund any overpayments to deposit account number 501315.

Respectfully submitted,

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